Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Currently amended) A negative resistance circuit comprising:

subtracting means to which an input signal is applied;

amplifying means for amplifying an output signal of the subtracting means;

positive feedback means for positively feeding back an output signal of the amplifying means to an input of the subtracting means;

dividing means for dividing the output signal of the amplifying ~~mans~~means;

negative feedback means for negatively feeding back a divided output signal of the dividing means; and

dividing ratio of the dividing means and amplification factor of the amplifying means being set to provide negative resistance between an input of the subtracting means and earth.

2. (Currently amended) A negative resistance circuit according to claim 1 wherein the subtracting means is constituted by a collector-emitter dividing type amplifying circuit comprising ~~of~~ a npn transistor, and the amplifying means is constituted by an emitter earth type amplifying circuit comprising ~~of~~ a pnp transistor, the input signal being applied to a base of the npn transistor, a collector output thereof being connected to a base of the pnp transistor ~~to take out it~~ as said output signal.

3. (Currently amended) A negative resistance circuit according to claim 1 wherein the subtracting means is constituted by a collector-emitter dividing type amplifying circuit comprising ~~of~~ a pnp transistor and the amplifying means is constituted by an emitter earth type amplifying circuit comprising ~~of~~ a npn transistor, the input signal being applied to a base of the pnp transistor, a collector output thereof being connected to a base of the npn transistor ~~to take out it~~ as said output signal.

4. (Currently amended) A negative resistance circuit according to claim 1 wherein the subtracting circuit is constituted by a collector-emitter dividing type amplifying circuit comprising ~~of~~ a first transistor and the amplifying means is constituted by an emitter earth type amplifying circuit comprising ~~of~~ a second transistor, the input signal being applied to a base of the first transistor, a collector output thereof being connected capacitively to a base of the second transistor ~~to take out it~~ as said output signal.

5. (Currently amended) A negative resistance circuit according to claim 1 wherein the subtracting means is constituted by a drain-source dividing type amplifying circuit comprising ~~of~~ a first FET transistor and the amplifying means is constituted by a source earth type amplifying circuit comprising ~~of~~ a second FET transistor, the input signal being applied to a gate of the first FET transistor, an output thereof being connected to a gate of the second FET transistor ~~to take out it~~ as said output signal.